

# Dvorak Developments

Dvorak Developments #47 (Volume 14, Number 1) -- Fall 1986

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## From the Editor's Keyboard

by Randy Cassingham

I dropped in on my local Silver Reed dealer and tried out the new Silver Reed EZ 50 typewriter. Despite what Smokey Umeda, Silver Reed's Assistant Vice President in charge of service and technical design, told me -- that Silver Reed probably wouldn't introduce a model that was switchable between Qwerty and Dvorak -- the new machine *is* indeed switchable. Dvorak is built into the standard "Control Pack", a plug-in module that is necessary for the machine to work, along with the Qwerty layout. Dvorak is selected by pushing a certain combination of keys.

### Features

The first thing I noticed about this office typewriter is the noise -- or actually the lack of it. The EZ 50 is the quietest typewriter I've ever used. And it does a lot; even the basic setup (\$700 at retail) is feature-laden. Automatic carriage return, centering, flush right, boldface, and a 500 character correction key are all standard features. For added cost, you can add a memory pack, an LCD display, a computer printer interface and a 90,000 word dictionary.

As far as the Dvorak capability, it's good. There was no problem with the machine's internal conversion, even when I typed fast. The layout follows the ANSI standard, as it should. Switching between Qwerty and Dvorak is simple, and the EZ 50 "remembers" which mode it is in so that when you turn the machine on later, the right layout is selected.

The keyboard shows only the Qwerty legends, and the salesman at the dealership I went to wasn't informed as to how to make them show Dvorak (although, to his credit, he did know what the Dvorak was and said he used that feature as a sales pitch). I happen to know, however, that Silver Reed has contracted to supply keyboard overlays made by the Hooleon Company. They show both Qwerty and Dvorak legends. You may have to request them from the dealer or from Silver Reed to get them, but they *are* available.

### Switching Capability a Plus, but...

I am glad that Silver Reed chose to make the machine switchable. It would take quite a determined and confident corporation to buy a large quantity of Dvorak-only machines. With this switchable machine, though, they can buy their typewriters with the knowledge that they can, if they want, switch to Dvorak at any time and, if necessary, switch back, all without added cost.

A lot of this potential is undone, however, by Silver Reed's failure to even mention the word "Dvorak" in their slick six page color brochure. This is the first Dvorak/Qwerty switchable typewriter to be mass-manufactured, and they are not taking full advantage of their still-unique position in the marketplace. Unfortunately, this seems to be common with

larger companies with Dvorak products: they don't make their Dvorak ability known, but then they complain when their Dvorak-related sales aren't good. Key tronics, which makes replacement keyboards for IBM PCs, is a good case in point: they run big ads telling how good their keyboards are (including a long run in the *Wall Street Journal*), but they never bother to include a single line saying "Dvorak layout also available". Key tronics complained to me that their Dvorak keyboards weren't selling well. *No wonder!* I hope Silver Reed gets the message and at least mentions their Dvorak feature in EZ 50's future advertising.

Silver Reed seems to be staking a lot on the EZ 50, so it is probably at your local dealer if you want to go take a look at it. My local dealer said it was selling well -- they sold six of them in the first week they were available.

### More Overviews Coming

Still to come in the issues ahead are several Product Overviews -- reviews of Dvorak-related products. We apologize to readers who are looking for something specific to be reviewed, and to vendors who have been waiting some months for their products' review to be published. We have a large backlog of products waiting to be reviewed, including the XtraKey conversion package for CP/M-based computers, the CP/M version of the SmartKey conversion package, the Prelco conversion chip for the Commodore-64, Q.A.D. Systems' Q-Vert Mentor (a tutorial for the C-64), Seasoned Systems' SureStroke conversion/tutorial package for the IBM PC, and ACU-Business Systems' Acutype PC conversion software.

Some other packages have never been sent to us for review, and so will not be reviewed. If there is a particular product you want to see reviewed, let us know. We'll do our best to get a review copy of the product.

### The New Look

You've probably noticed a different look to the newsletter this quarter. We are in the middle of a transition between a typeset newsletter and a layout created on computer (also known as "desktop publishing").

This transition, plus moving our offices 800 miles to the south, has been added to some other problems that have made this issue come out later than we would have liked. Future issues should be back on schedule.

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*Virginia Russell's* column did not arrive in time for publication.

## Letters

### Does Qwerty Inhibit Dvorak Learning?

I enjoyed your book *The Dvorak Keyboard* very much, and I am considering switching to Dvorak. I have a question, though. Clearly, years of Qwerty typing will be a pro-active inhibition in learning the Dvorak, but your book clearly shows that this slight disadvantage is easily overcome and a net gain is made. I am worried about becoming adept at my own home computer on Dvorak, but still having to function in a Qwerty world. It seems to me that the lateral inhibition would be intense. What would you recommend? Keeping oneself completely innocent of the evil Qwerty once the Dvorak promised land has been reached, or maintaining minor or partial proficiency on Qwerty?

Dave Meckler  
Cincinnati, OH

*There are two topics here: whether Qwerty inhibits Dvorak training and whether it is possible to retain your Qwerty proficiency after converting. As to the first, I recommend that you try to use Dvorak only while you are in the learning stage. Using both during this time might increase the training time necessary to break your old Qwerty proficiency. Your Qwerty skill won't hinder your Dvorak learning -- it will help since you already have developed the coordination and the finger movements necessary to travel over the keyboard (you've actually overlearned them, due to Qwerty's much-higher demands on your fingers). Your Dvorak training time will not only be much less than when you first learned how to type on Qwerty, but it should actually be less than if you started with Dvorak without having any typing skills at all.*

*Actually, it doesn't really matter how long you've used Qwerty, but rather how well you type on it. Some of the most successful Dvorak converts are those who didn't do too well on Qwerty, but excelled when the keyboard was changed (such as Dvorak whiz Barbara Blackburn, who flunked typing in high school but now types 200 wpm on Dvorak [see last issue]). But even excellent Qwerty typists tend to like Dvorak better because it is so much easier to type on.*

*In any case, you definitely can retain Qwerty proficiency if you want to. After you learn Dvorak, just keep typing on both regularly. It may be slightly confusing at first, but as you go along you should be able to keep them separate, like secretaries who know both types of shorthand or anyone who knows two spoken languages. I don't use Qwerty unless I absolutely have to (I often carry my Dvorak keyboard or my SmartKey disk so I can more easily use other computers), but I can still type on Qwerty if necessary.*

Letters should be addressed to Randy Cassingham, *Dvorak Developments*, PO Box 1895, Upland CA 91785. While not all letters can be personally answered, the most interesting will be printed here.

### Dvorak on HP Minis

I would be interested to know if you have any information about installing the Dvorak keyboard on an HP 3000 computer. I have contacted Key tronics, but they do not have a keyboard that will work on our terminals. I have also contacted HP, but they do not seem to be interested in trying to get this on their computer. I would like to be able to turn the keyboard on and off for individual people because not everyone (uses the) Dvorak.

David J. Lines  
West Jordan, UT

*The Hewlett Packard 3000, a multi-user minicomputer, should be switchable one way or another. Probably the easiest way, especially if you have an in-house programmer, is to write a "monitor" program which could be activated by those who want a Dvorak keyboard. The program would translate the keystrokes coming from the standard Qwerty terminals. One of Harvard University's central computers is switchable in this way. The user types a command ("tty;dvorak" if I recall correctly), and the computer switches to Dvorak for the rest of the session. You wouldn't actually have to modify the terminals in any way, except perhaps to rearrange the keys or apply Hooleon overlays to make it easier for the user.*

*It is sad that Hewlett Packard -- known as a progressive company in the electronics world -- wouldn't help you. I would suggest calling them again, talking to someone "higher up the ladder" and making it clear what it is you want. It wouldn't hurt to let them know that their decision not to support the Dvorak will enter into your buying decision when you some day replace your older computer.*

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## Dvorak Developments

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## Product Overviews

Product overviews are detailed descriptions of Dvorak-related products. The regular "for sale" version of the product is tested, then described in full so that readers can make intelligent choices on what products fit their needs. Opinions expressed in the overview are those of the author.

### Keyboard Master: The Key to Mastering Dvorak?

*Reviewed by Bob Nelson*

**Description:** Dvorak tutorial software for the IBM PC. This Software is copy protected. \$49.95.

**Supplier:** Power Up! 2929 Campus Drive Suite 300, San Mateo CA 94403, (800) 851-2917 (in Calif., (800) 223-1479).

**Machine used for test:** Leading Edge Model 'D'.

Keyboard Master, from the Power Up! catalog, is intended to provide the user with typing drills for learning either the Qwerty or Dvorak layouts. The user is greeted with a straightforward listing of five options: 1. Begin Lesson; 2. View Statistics; 3. Add New User; 4. Delete user; E. Exit. And here is when a major problem makes its ugly presence

known. When you choose the "Add New User" option, you are asked to enter your choice of keyboards, Qwerty or Dvorak. If you select the Dvorak option, from then on Keyboard Master reconfigures your Qwerty layout to Dvorak. This is fine if you are using a Qwerty keyboard, but if you already have a Dvorak layout, as I do, choosing this option precipitates instant chaos. Keyboard Master rearranges the keys for you, *even if you are already using a Dvorak keyboard*. The result is interesting but tends to generate total confusion.

After exiting Keyboard Master and switching my keyboard to Qwerty, I fumbled around this strange new terrain (Qwerty, that is) and finally managed to get Keyboard Master up and running again. Choosing the Dvorak option this time had the blessed effect of returning me once again to the familiar territory of the Dvorak layout, and I was off and typing. However, whenever I departed Keyboard Master, to enter a comment on my memory-resident notepad, for instance, I was once again left fumbling with the awkward Qwerty arrangement. This got old real fast, and I quickly decided to circumvent this maddening dilemma by retaining my Dvorak layout and, upon entering Keyboard Master,

*Continued on page 4*

## Our Lowest Price Ever

**The Dvorak Keyboard** is the first book of its kind. It gives you a clear explanation of the logical design and evolution of the Dvorak, information on how to convert, the reasons why we are still using the 19th Century Qwerty keyboard, hard-to-find information on Dvorak's one-hand keyboards, and more.

After you learn the basics of the keyboard, **Dvorak Developments** will keep you up to date with product announcements, information on who's switching to Dvorak, nonsense reviews of conversion hardware and software, and more.

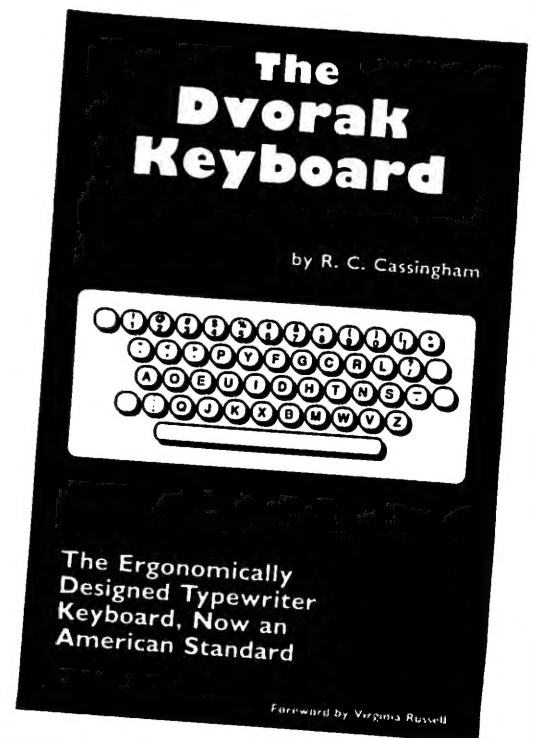
To celebrate our move to Southern California, we are offering a special price on **The Dvorak Keyboard**. Just subscribe (or renew your subscription) to **Dvorak Developments** for the normal price of \$12 for one year and you can have a copy of **The Dvorak Keyboard** for only \$10, including shipping! That's a savings of \$3.95 — our lowest price ever.

**Offer Extended!** Due to its popularity, the \$10 special offer has been extended until December 31, 1986. California Residents please add \$0.60 tax. For airmail shipping, add \$1.

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\*Our guarantee: if you are not satisfied with **The Dvorak Keyboard** for any reason, just return it in good condition within 10 days and we'll send you your money back. If you find that **Dvorak Developments** doesn't meet your needs, let us know and we'll refund your money for any unmailed issues. You can't lose!



ISBN 0-935309-10-1

Continued from page 3

choosing the Qwerty option. Henceforth, I had a Qwerty keyboard diagram displayed at the top of my screen, but at least I could type normally when using my notepad and after exiting to DOS. Considering that it isn't much good to practice Dvorak if you don't already have a Dvorak keyboard on your computer, this automatic keyboard mapping "feature" seems to cause more problems than it cures.

Once you get past the opening menus and begin the lesson, Keyboard Master puts a diagram of the keyboard layout up at the top of the screen and two blocky-looking hands at the bottom. These "hands" show the typist which finger to use, depending on the character to be typed, and they are periodically eclipsed by a box that displays the current statistics on your typing speed and accuracy.

Keyboard Master alternates between "accuracy" training and "speed" training. Errors made during the speed portion of the lesson do not seem to count against you (they do not decrease your word-per-minute count or affect the accuracy percentages). Similarly, the natural slowdown which occurs during the accuracy training does not register in the speed tallies.

Keyboard Master pauses occasionally to let you know how long you've been thumping away at the keyboard, and after 15 or 20 minutes, it will ask you to pause and rest your fingers. It subsequently does this every five minutes or so while it updates your personal records.

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*The major disadvantage of this method is that it doesn't teach the typist the normal letter sequences that make up written text.*

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During the lesson, you can see the letters you type appear just below the line of text that you are copying. Mistakes during the speed testing stand out as highlighted letters. When you make a typo, you cannot go back to correct it -- you must proceed. When accuracy is being stressed, however, the cursor will pause when you strike an incorrect letter. You cannot go on until the correct one is entered. The program keeps track of the typos being made and gives the speed and error count when you have finished the line of text.

When Keyboard Master begins a lesson, it loads your personal records and picks up where you left off the last time. This process avoids redundancy and allows the user to proceed in honing his skills in new areas while still offering positive reinforcement of skills learned in prior lessons. The lesson moves back and forth between speed and accuracy tests.

The speed tests consist mostly of sentences and sentence fragments, which include a variety of words while maintaining a semblance of normal English. The accuracy

tests are used to introduce new characters. The line of text printed on the screen is made up of random, four-letter groupings which usually emphasize only four different characters from the keyboard. This type of exercise makes for rather tedious and repetitious work, but it does force one to concentrate on hitting the right key. The advantage of this approach is that the program forces you to practice ALL the keystrokes used in typing and not just the more common ones (you become familiar with the location of the - ; ' / x z and q as well as the more frequently used letters and punctuation marks).

The major disadvantage of this method is that it doesn't teach the typist the normal letter sequences that make up written text. Nonsense words are not only boring, and therefore decrease motivation, but they do not exist in normal text. There is no reason to condition a response that will never be used in the real world of typing while ignoring other letter combinations that will be. I should point out, however, that most every typing program I have been exposed to over the years has included a healthy dose of nonsense words for the poor student to stumble over. But such nonsense words aren't necessary when you are using a Dvorak keyboard, since thousands of real words can easily be made with just the home row keys.

Overall, I was not particularly impressed with the Keyboard Master typing tutorial program. Its overuse of nonsense words, reordering of the keyboard layout when the Dvorak option is selected and lack of more complex text structures (such as multiple lines and paragraphs) make it a rather poor teacher for the kind of text a person faces in the "real" world. This program does little to make a boring task easier or more enjoyable, and its limitations are a handicap to learning true typing skills. Also, Keyboard Master is copy protected, which does not permit the making of any backup copies.

### **MacQwerty - \$35**

#### **Keyboard Reconfiguration Program For the Macintosh**

A Dvorak keyboard or your custom layout, with a single click or automatically at boot-up. Another click, keyboard reverts to Standard. Reconfiguration program customizes the keyboard. Any non-command key can be relocated and fixed at boot-up to your personal preference. Easy on disk instructions.. Visa or M/C.

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## TYPING MADE EASY

*(Or At Least More Entertaining!)*

*Reviewed by Bob Nelson*

**Description:** Dvorak tutorial software, for the IBM PC, and the Apple IIc and Macintosh. This software is copy protected. \$59.95.

**Supplier:** QED Information Sciences, PO Box 151, Wellesley MA 02181, (800) 343-4848.

**Machine used for test:** Leading Edge Model 'D'.

When you fire up QED's Typing Made Easy program, you are in for a polished and impressive display of graphical pyrotechnics. The program moves smoothly through a series of overlay screens and visually stimulating prompts. After you have entered your name or initials in the "Student Roster", TME presents a pyramid of options. These allow the student to practice the home row keys, up, down and side reaches, capitals, numbers, special characters and paragraphs. To get you started, you can also choose to do some warm ups before beginning the actual lesson.

Once you make a selection and start a typing session, TME displays a diagram of the keyboard you have chosen (Dvorak or Qwerty) and highlights the keys which the lesson will focus on. The Dvorak keyboard shown by TME follows the ANSI standard layout, though it is up to you to have already converted your keyboard to Dvorak.

When the actual lesson begins, TME places a Word Per Minute meter across the top of the screen, below which appear the lines of letters or text you are to type. Near the bottom of the display is a message box that tells you what to do next and at times lends a few encouraging words. As you type, the cursor moves to highlight the letter to be typed next.

No mistakes are displayed until the lines are finished, at which time the typos are highlighted and the message box shows your speed, accuracy percentage and net speed. Each time you begin typing the drill text, a metronome-like clicking sound starts emanating from the computer speaker and continues until the last <Return> is entered. Also, the WPM meter at the top of the screen provides a dynamically fluctuating display of your average (gross) speed as you type. This combination of auditory and visual stimuli produces a definite sense of urgency. In fact, I felt so pressured to keep up my speed at times -- watching the WPM meter slip back whenever I slacked off the least bit and listening to the ticking metronome driving me on with its steady beat -- that I would push too hard and end up producing a torrent of mistakes.

These typos count heavily against your net speed, and the adjusted WPM can dip quite low even when your raw speed is high. The best results come about when the user ignores the visual and auditory distractions produced by the program and concentrates wholly on typing the text.

A line of options at the bottom of the screen allows you to display your progress after using the program a few times. TME graphically displays the keys that are well below your average speed or accuracy, lists the best speed you have achieved so far, your average speed and your average adjusted words per minute. It then draws two successive bar graphs -- the first shows the speed for each key you have used so far, and the second shows the accuracy with which you have been hitting each key. Other options include the ability to go back to the last screen, go forward to the next, return to the main menu or choose the "Drill", which starts the lesson.

One of the drill session options is practicing with paragraphs. This is a much more satisfying procedure than typing a limited, repetitious group of random characters, line after line, with a few occasional lines of actual words (not sentences) thrown in for variety. In the paragraph drill, as in the other drills, you cannot see your errors until the paragraph is finished. However, TME is sophisticated enough to keep track of where you are in a paragraph even if you get out of step with what is written there. For example, say you accidentally hit two keys when you are aiming for one, producing a double letter output from the keyboard. You are now one letter out of phase with what you are copying and the result could be a string of errors. But TME recognizes the error and matches the keyboard output to the text on a word-by-word basis so that only the extra character in the two-key hit is flagged as an error.

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***It forces strong concentration and quick responses, reinforcing the skills learned in the drill sessions.***

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TME also has a nifty little game built into it that can provide both fun and practice for the brain-numbed typist. This game is patterned after the famous *PACMAN* arcade game. The major difference lies in the way you move your "Pacman" around; you need to type the letter that appears next to it. When the correct letter is typed, the character will move into each letter's space, winding its way through the labyrinth as you hit the proper sequence of letters. You can select the speed at which the "monsters" will chase you, but don't get too cocky or you'll get eaten. While this game may seem rather silly, it in fact forces strong concentration and quick responses, reinforcing the skills learned in the drill sessions.

Overall, I found Typing Made Easy to be a very polished, sophisticated and satisfactory program. Its visual displays and use of audible prompts makes using the program a stimulating experience. But this "sight and sound" approach

*Continued on page 6*

## Product Alerts

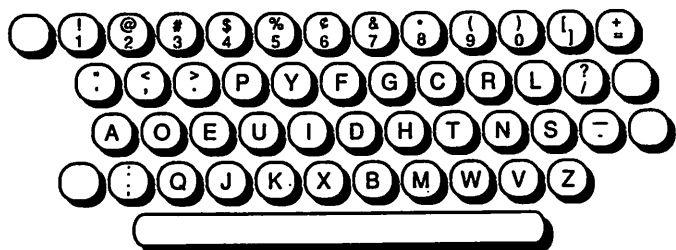
ACU-Business Systems, 819 West Sixth Street, Winona MN 55987, offers Acutype, a new conversion program for the IBM PC and compatibles. The package is \$24.95, or \$29.95 with temporary "key tabs" to show the Dvorak layout while training.

Tri-Mike Network East, 33 Virginia Drive #22, Monroe MI 48161, has announced a long-awaited product: a Dvorak conversion for the Radio Shack Model 100/102 laptop computers. Tri-Mike says the conversion makes "the machine act as if Tandy had built it that way." Conversions for the Model 200 and the NEC 8201 are coming. \$24.95 includes shipping.

*Continued from page 5*

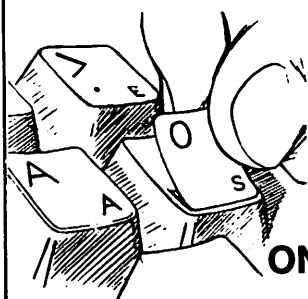
has its drawbacks in that at times it becomes distracting, or even stressful, and can detract from efficient learning.

Something I didn't like about the program was the need to strike the <Return> key at the end of each line -- even when typing paragraphs. Since TME is targeted at people who own computers, and since most people who write on computers use a word processing program with automatic "word wrap", I can see no point in forcing the typist to hit <Return> at the end of every line in the paragraph drills. This approach only makes sense if a person was practicing for using a typewriter. It would be nice if the program allowed you to choose whether or not the return key was needed at the end of a line. Also, TME is copy protected so you cannot make backup disks. Outside of these annoyances, TME proved to be a very satisfying way to learn touch typing on the Dvorak keyboard. The more I used the program, the faster (and more error free) my typing became. I still have a long way to go, but Typing Made Easy has accelerated my pace, as well as increased my interest, in mastering Dvorak.



## — ANNOUNCING — A quick and easy way to convert your Keytops to DVORAK.

Hooleon Keytop overlays give you DVORAK commands in bold red print and original qwerty commands in smaller black print on an opaque background. The overlays are made of rigid high quality plastic with a permanent non-slip adhesive. Printing is on the underside to prevent wear. They look and feel like your original key tops.



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☐ Send me \_\_\_ copies of *The Dvorak Keyboard* by Randy Cassingham, the book that tells me why Dvorak is better than "Qwerty" and why I should switch. Enclosed is \$12.95 per copy plus \$1 shipping (any number shipped for \$1). I've added \$0.78 tax if shipped to California.

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## Back Issues

+ Winter, 1985. IRS estimates \$775 million/year savings by converting field examiners to Dvorak. Smithsonian requests Dvorak typewriter. Listings of 8 companies with Dvorak products. Product overview on Keyer. 4 bibliographic entries. 6 pages. *Very few copies left.*

+ Spring, 1986. Silver Reed to introduce Dvorak machines. Virginia Russell's column on Repetitive Strain Injuries and keyboarding. Report on the controversy brewing over the issue of finger travel. Listings of 4 new Dvorak products. Product overviews on MacQwerty, Hooleon Overlays, Superkey, the Maxi-Switch keyboard, and Keyboard Cadet. 5 bibliographic entries. 8 pages.

+ Summer, 1986. Aetna managers learning Dvorak. Virginia Russell's column on Dvorak one-handed keyboards. Randy Cassingham's column on the increased interest in the Dvorak from many sectors. Information on the telephone company's use of Dvorak. Profile on Dvorak speed demon Barbara Blackburn. Product overview on SmartKey. 4 bibliographic entries. 8 pages.

Back issues are \$2 each, postage included. Order from Freelance Communications, PO Box 1895, Upland CA 91785. Write for information about other issues available.

## ORIGINAL dvorak TYPING MANUAL

Smith Corona Manual for Dvorak Typing

Published by the Dvorak International Federation  
Written by August Dvorak and Smith Corona Corporation

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Mail form to: Dvorak International Federation, Box 128, Brandon, VT 05733

## Bibliographic Notes

+ *Discover*, August 1986. An article on the Dvorak which states "there's no good reason that Qwerty survives today -- especially since a much better arrangement was invented 50 years ago."

+ *Portable 100/200/600*, July 1986. This article not only introduces the Dvorak, but tells how to convert the popular Radio Shack Model 100 laptop computer to Dvorak. The article was written by Mike Nugent of the Tri-Mike Network East (see the Products Alert section).

## Free: Listing of Dvorak Products

We've compiled a listing of Dvorak products from the Product Alert section of *Dvorak Developments*. It's updated whenever new products come out. For a free copy, send a self-addressed, stamped business-sized envelope to: Dvorak products, PO Box 1895, Upland CA 91785.

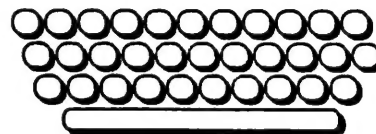
## Classified

.....

QUALITY DVORAK TYPEWRITERS - Price Slashed!  
SCM #2500 - originally \$400, now \$225 + \$15 shipping  
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Apple IIe (ANSI) Dvorak/Qwerty switch with overlays.....\$41.95  
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